2014 Annual Drinking Water Quality Report of the City of Leesburg

Annual Water testing performed in 2014

PWS ID #
3350745 City,
3351566 East,
3354869 Highland Lakes,
3354650 Plantation,
3354929 Royal Highlands

Meeting the Challenge

We are pleased to present to our annual water quality report covering all testing performed between January 1 and December 31, 2014. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting our goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

For more information about this report, or for any questions related to your drinking water, please call Al Purvis, Chief Water Operator, at (352)728-9835, or visit our Web site at, www.leesburgflorida.gov/ccr

Community Participation

You are invited to participate in our commission meetings and voice your concerns about your drinking water. We meet on the third floor of City Hall the second and fourth Monday of each month at 5:30 p.m. City Hall is located at 501 W. Meadow Street in Leesburg, Florida.

Where Does My Water Come From?

All of our Treatment Facilities, which include the City, East (Airport and Mall) Highland Lakes, Plantation and Royal Highlands take ground water from the Floridan Aquifer within the Ocklawaha Watershed.

Chlorine gas is used at the City, East and Plantation water systems and liquid sodium hypochlorite (NaOCL) is used at the Highland Lakes and Royal Highlands Treatment Facilities as disinfectants. These disinfectants are used as a precaution against any bacteria that may be present. We carefully monitor the amount of disinfection used, adding the lowest quantity necessary to protect the safety of our water without compromising taste. Our Water systems are serviced by a total of 18 wells, ranging in depth from 250 feet to 1000 feet. We have storage capacity, in ground storage tanks and elevated towers to store 5.27 million gallons of water. All systems combined serve a total of 18,416 meter connections with an average daily flow of 6.762 million gallons. Our water hardness ranges between 7 & 8 grains, which is 125 to 143 mg of calcium carbonate per liter of water.

Source Water Assessment

In 2014 the Department of Environmental protection performed a Source Water Assessment on our systems. These assessments are conducted to provide information about any potential sources of contamination in the vicinity of our wells. The assessment shows 3 potential sources of contamination with a moderate susceptibility level. The East system has 1 potential source with a moderate susceptibility level. The Plantation system indicated 1 potential source with a low susceptibility level. The Highland Lakes and Royal Highland systems indicated no potential sources of contamination. The assessment results are available on the FDEP Source Water Assessment and Protection Program Web site at www.dep.state.fl.us/swapp

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
B. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also, come from gas stations, urban storm water runoff, and septic systems.
E. Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Drinking Water Hotline, or at www.epa.gov/safewater/lead.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Definitions

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

MCL or Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG or Maximum Contaminant Level Goal : The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

AL Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

DSMRT Distribution system Maximum Residence Time.

EPTDS Entry Point To the Distribution System

IDSE Initial Distribution System Evaluation: An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and halo acetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

LRAA Locational Running Annual Average: The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

MRDL or Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG or Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

ND means not detected and indicates that the substance was not found by laboratory analysis

NA means not applicable.

pCi/L Picocurie per liter (pCi/L) - measure of the radioactivity in water

ppb Parts per billion or Micrograms per liter (µg/l) – one part by weight of analyte to 1 billion parts by weight of the water sample.

ppm Parts per million or Milligrams per liter (mg/l) – one part by weight of analyte to 1 million parts by weight of the water sample.

Sampling Results

The City of Leesburg Water Systems routinely monitor for contaminants in your drinking water according to Federal and State laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2014. Data obtained before January 1, 2014, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

PRIMARY REGULATED CONTAMINANTS

Radioactive Contaminants						**City**	**Airport**	**Mall**	**H.L.**	**Plant.**	**R.H.**	
Contaminant and Unit of Measurement	**Dates of sampling (mo. /yr.)**	**MCL Violation Y/N**	**Range of Results**	**MCLG**	**MCL**	**Level Detected**	**Level Detected**	**Level Detected**	**Level Detected**	**Level Detected**	**Level Detected**	**Likely Source of Contamination**
Alpha emitters (pCi/L)	**1/2011**	**NO**	**NA**	**0**	**15**	**ND**	**1.9**	**0.1**	**1/2012 1.2**	**1.3**	**1.6**	Erosion of natural deposits
Radium 226 + 228 or combined radium (pCi/L)	**1/2011**	**NO**	**NA**	**0**	**5**	**1.6**	**1.8**	**1.2**	**1/2012 NA**	**0.9**	**1.0**	Erosion of natural deposits
Inorganic Contaminants												**Likely Source of Contamination**
Arsenic (ppb)	**1/2014**	**NO**	**NA**	**0**	**10**	**ND**	**ND**	**ND**	**ND**	**1.95**	**ND**	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	**1/2014**	**NO**	**NA**	**2**	**2**	**0.00539**	**0.0115**	**0.0170**	**1/2012 0.00866**	**0.0143**	**1/2012 0.0106**	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	**1/2014**	**NO**	**NA**	**100**	**100**	**ND**	**1.0**	**ND**	**1/2012 11.0**	**ND**	**1/2012 12.5**	Discharge from steel and pulp mills; erosion of natural deposits
Lead (point of entry) (ppb)	**1/2014**	**NO**	**NA**	**0**	**15**	**ND**	**ND**	**ND**	**1/2012 1.54**	**ND**	**1/2012 2.86**	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Nickel (ppb)	**1/2014**	**NO**	**NA**	**N/A**	**100**	**ND**	**ND**	**ND**	**1/2012 2.61**	**ND**	**1/2012 1.87**	Pollution from mining and refining operations. Natural occurrence in soil
Nitrate (as Nitrogen) (ppm)	**1/2014**	**NO**	**NA**	**10**	**10**	**0.196**	**ND**	**ND**	**ND**	**ND**	**3.09**	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	**1/2014**	**NO**	**NA**	**N/A**	**160**	**5.79**	**4.80**	**5.27**	**1/2012 7.52**	**4.44**	**1/2012 5.88**	Salt water intrusion, leaching from soil

Disinfectant and Stage 2 Disinfection By-Products

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo. /yr.)	MCL or MRDL Violation Y/N	MCLG or MRDLG = 4	MCL or MRDL = 4.0	City	Airport	Mall	H.L.	Plant.	R.H.	Likely Source of Contamination
Chlorine (ppm)			Range of Results								Water additive used to control microbes
1/2014 – 12/2014		NO	1.57 – 2.08		1.84						
1/2014 – 12/2014		NO	1.41 – 1.88			1.60					
1/2014 – 12/2014		NO	1.41 – 1.88				1.60				
1/2014 – 12/2014		NO	1.46 – 2.00					1.66			
1/2014 – 12/2014		NO	1.20 – 1.78						1.48		
1/2014 – 12/2014		NO	1.01 – 1.46							1.22	

City System Stage 2 – Disinfectant and Disinfection By-Products

Contaminant and Unit of Measurement Sample Site # 1	Dates of sampling (mo. /yr.)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	10/2013 – 7/2014	NO	18.45	12.5 – 26.3	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	10/2013 – 7/2014	NO	18.02	13.6 – 22.3	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement Sample Site # 2	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	10/2013 – 7/2014	NO	13.12	10.4 – 19.7	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	10/2013 – 7/2014	NO	19.6	15.7 – 21.8	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement Sample Site # 3	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	10/2013 – 7/2014	NO	17.92	12.2 – 23.4	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	10/2013 – 7/2014	NO	18.52	14.7 – 22.1	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement Sample Site # 4	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	10/2013 – 7/2014	NO	22.92	13.7 – 30.1	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	10/2013 – 7/2014	NO	24.47	18.9 – 30.1	N/A	80	By-product of drinking water disinfection

East System Stage 2 - Disinfectant and Disinfection By-Products							
Contaminant and Unit of Measurement **Airport -Sample Site**	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	7/2014 – 10/2014	NO	13.98	9.87 – 18.1	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/2014 – 10/2014	NO	28.20	21.8 – 34.6	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement **Mall - Sample Site**	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	7/2014 – 10/2014	NO	13.37	7.74 – 19.0	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/2014 – 10/2014	NO	26.95	18.3 – 35.6	N/A	80	By-product of drinking water disinfection

Highland Lakes System Stage 2 – Disinfectant and Disinfection By-Products							
Contaminant and Unit of Measurement **Sample Site # 1**	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	7/2014 – 10/2014	NO	15.85	12.1 – 19.6	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/2014 – 10/2014	NO	23.2	21.0 – 25.4	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement **Sample Site # 2**	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	7/2014 – 10/2014	NO	17.05	14.1 – 20.0	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/2014 – 10/2014	NO	22.6	20.9 – 24.3	N/A	80	By-product of drinking water disinfection

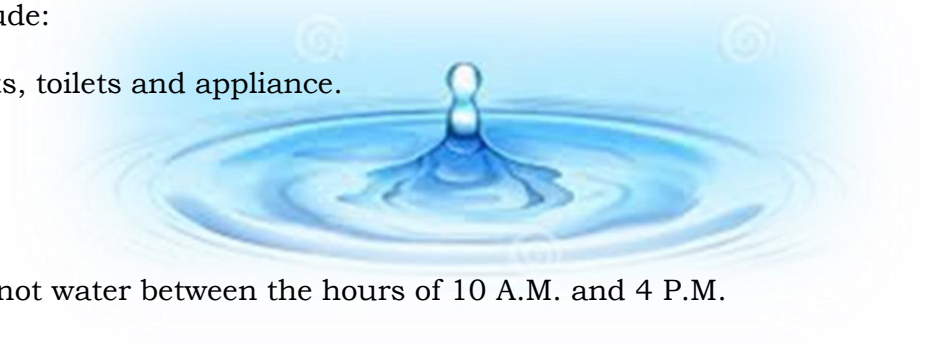
Plantation System Stage 2 - Disinfectant and Disinfection By-Products							
Contaminant and Unit of Measurement **Sample Site # 1**	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	7/2014 – 10/2014	NO	15.05	11.7 – 18.4	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/2014 – 10/2014	NO	24.00	23.9 – 24.1	N/A	80	By-product of drinking water disinfection
Contaminant and Unit of Measurement **Sample Site # 2**	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	7/2014 – 10/2014	NO	19.65	13.0 – 26.3	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	7/2014 – 10/2014	NO	33.6	21.9 – 45.3	N/A	80	By-product of drinking water disinfection

Royal Highlands System Stage 2 - Disinfectant and Disinfection By-Products							
Contaminant and Unit of Measurement Sample Site # 1	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**
Haloacetic Acids (HAA5) (ppb)	**7/2014 – 10/2014**	**NO**	**9.83**	**5.96 – 13.7**	**N/A**	**60**	**By-product of drinking water disinfection**
Total Trihalomethanes (TTHM) (ppb)	**7/2014 – 10/2014**	**NO**	**20.1**	**19.8 – 20.4**	**N/A**	**80**	**By-product of drinking water disinfection**
Contaminant and Unit of Measurement Sample Site # 2	**Dates of sampling (mo. /yr.)**	**MCL Violation (Y/N)**	**Level Detected**	**Range of Results**	**MCLG**	**MCL**	**Likely Source of Contamination**

Lead and Copper (Tap water samples were collected throughout the communities)							
City							
Contaminant and Unit of Measurement	**Dates of sampling (mo. /yr.)**	**AL Exceeded (Y/N)**	**90th Percentile Result**	**No. of sampling sites exceeding the AL**	**MCLG**	**AL (Action Level)**	**Likely Source of Contamination**
Copper (tap water) (ppm)	**9/2014**	**NO**	**1.22**	**0**	**1.3**	**1.3**	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	**9/2014**	**NO**	**6.0**	**0**	**0**	**15**	Corrosion of household plumbing systems; erosion of natural deposits
Airport / Mall							
Copper (tap water) (ppm)	**9/2014**	**NO**	**0.938**	**0**	**1.3**	**1.3**	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	**9/2014**	**NO**	**10.7**	**0**	**0**	**15**	Corrosion of household plumbing systems; erosion of natural deposits
Highland Lakes							
Copper (tap water) (ppm)	**8/2014**	**NO**	**0.746**	**0**	**1.3**	**1.3**	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	**8/2014**	**NO**	**1.05**	**0**	**0**	**15**	Corrosion of household plumbing systems; erosion of natural deposits
Plantation							
Copper (tap water) (ppm)	**8/2014**	**NO**	**1.03**	**0**	**1.3**	**1.3**	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	**8/2014**	**NO**	**1.36**	**0**	**0**	**15**	Corrosion of household plumbing systems; erosion of natural deposits
Royal Highlands							
Copper (tap water) (ppm)	**8/2014**	**NO**	**0.927**	**0**	**1.3**	**1.3**	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	**8/2014**	**NO**	**2.04**	**0**	**0**	**15**	Corrosion of household plumbing systems; erosion of natural deposits

water conservation

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but can also save you money by reducing your water bill. Here are a few suggestions:
Conservation measures you can use inside your home include:



- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliance.
- Wash only full loads of laundry.
- Run Dishwashers only if fully loaded.
- Take shorter showers.
- Turn water off when brushing your teeth.

You can conserve outdoors as well:

- Water the lawn and garden early morning or evening. Do not water between the hours of 10 A.M. and 4 P.M.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.

Information on other ways you can help conserve water can be found at:
www.epa.gov/safewater/publicoutreach/index.html.

Contamination from Cross-Connections

Cross-connections that contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems) or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand) causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage). Outside water taps and garden hoses tend to be the most common sources of cross-connection contamination at home. The garden hose creates a hazard when submerged in a swimming pool or when attached to a chemical sprayer for weed killing. Garden hoses that are left lying on the ground may be contaminated by fertilizers, cesspools or garden chemicals. Improperly installed valves in your toilet could also be a source of cross-connection contamination. Community water supplies are continuously jeopardized by cross-connections unless appropriate valves, known as backflow prevention devices, are installed and maintained. We require home and business owners that are on City of Leesburg water to have their Backflow Prevention devices installed properly and tested annually as required by State Statue and by DEP Rule 65.555.360 to ensure that it is providing maximum protection. In addition to the annual test we require a copy of the annual test report for our records as well.

For more information, review the Cross-Connection Control Manual from the U.S. EPA's Web site at www.epa.gov/safewater/crossconnection.html.